

CLAIMS

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The invention is claimed as follows:

1. A method for delivering a medicament to an individual comprising the steps of:

5 providing a product that includes a gum base center and a coating that substantially surrounds the center, the coating comprising at least 50% by weight of the product, the coating including a medicament;

chewing the product to cause the medicament to be released from the product into the buccal cavity of the individual; and

10 continuing to chew the product thereby creating a fluid pressure causing the medicament to enter the systemic system of the individual through an oral mucosa of the individual.

2. The method of Claim 1 wherein the coating includes a high-intensity sweetener.

15 3. The method of Claim 1 wherein the high-intensity sweetener is chosen from the group consisting of aspartame, sucralose, saccharin, and acesulfame-k.

20 4. The method of Claim 1 wherein the coating is produced by alternating layers of a powder and a syrup onto the gum base center.

25 5. The method of Claim 1 wherein the medicament is chosen from the group consisting of: analgesics; muscle relaxants; antibiotics; antivirals; antihistamines; decongestants; anti-inflammatories; antacids; anesthetics; antifungal agents; antimicrobial agents; cancer therapies; antimycotics; oral contraceptives; diuretics; antitussives; nutraceuticals; probiotics; bioengineered pharmaceuticals; oral vaccines; hormones; psychotherapeutic agents; insulin; vitamins; minerals; and cardiovascular agents.

30 6. The method of Claim 1 wherein the coating has a matte finish.

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7. The method of Claim 1 wherein the coating does not include a shellac layer.
8. A product comprising:
- 5 a chewable water insoluble center; and
- a coating including a medicament that surrounds the center, the coating comprising at least 50% by weight of the product.
9. The product of Claim 8 wherein the medicament is chosen from the group consisting of: analgesics; muscle relaxants; antibiotics; antivirals; stimulants; 10 antihistamines; decongestants; anti-inflammatories; antacids; anesthetics; antifungal agents; antimicrobial agents; cancer therapies; antimycotics; oral contraceptives; diuretics; antitussives; nutraceuticals; probiotics; bioengineered pharmaceuticals; oral vaccines; hormones; psychotherapeutic agents; insulin; vitamins; minerals; and cardiovascular agents.
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10. The product of Claim 8 wherein the coating includes a sufficient amount of taste masking agent to provide acceptable organoleptic properties.
11. The product of Claim 10 wherein the taste masking agent is chosen from 20 the group consisting of: zinc gluconate, ethyl maltol, glycine, acesulfame-k, aspartame; saccharin; fructose; xylitol; isomalt; maltitol; spray dried licorice root; glycrrhizine; sodium gluconate; glucono delta-lactone; ethyl vanillin; dextrose; sucralose; vanillin; and ethyl maltol.
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12. The product of Claim 10 wherein the taste masking agent comprises approximately 30% to about 99% by weight of the coating.
13. The product of Claim 8 wherein the coating includes approximately 0.5% to about 5% by weight of a high-intensity sweetener chosen from the group 30 consisting of aspartame, sucralose, saccharine, and acesulfame-k.
14. The product of Claim 8 wherein the coating does not have a shellac layer.

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15. A chewable product including a medicament comprising:
a center consisting of ingredients chosen from the group consisting of
elastomers, resins, fats, oils, softners, and inorganic fillers; and
5 a coating that at least substantially surrounds the center and includes a
medicament *et al 38*
16. The product of Claim 15 wherein the medicament is chosen from the
group consisting of: analgesics; muscle relaxants; antibiotics; antivirals; stimulants;
10 antihistamines; decongestants; anti-inflammatories; antacids; anesthetics; antifungal
agents; antimicrobial agents; cancer therapies; antimycotics; oral contraceptives;
diuretics; antitussives; nutraceuticals; probiotics; bioengineered pharmaceuticals; oral
vaccines; hormones; psychotherapeutic agents; insulin; vitamins; minerals; and
cardiovascular agents.
- 15 17. The product of Claim 15 wherein the coating includes a sufficient
amount of taste masking agent to provide acceptable organoleptic properties.
18. The product of Claim 15 wherein the taste masking agent is chosen from
20 the group consisting of: zinc gluconate, ethyl maltol, glycine, acesulfame-k, aspartame;
saccharin; fructose; xylitol; isomalt; maltitol; spray dried licorice root; glycrrhizine;
sodium gluconate; glucono delta-lactone; ethyl vanillin; dextrose; sucralose; vanillin;
and ethyl maltol.
- 25 19. The product of Claim 15 wherein the taste masking agent comprises
approximately 30% to about 99% by weight of the coating.
20. The product of Claim 15 wherein the coating includes approximately
0.5% to about 5% by weight of a high-intensity sweetener chosen from the group
30 consisting of aspartame, sucralose, saccharine, and acesulfame-k.
21. The product of Claim 15 wherein the coating comprises at least 70% by
weight powder when it is applied to the gum center.

22. The product of Claim 15 wherein the coating comprises approximately 50 to about 75% by weight of the product.

5 23. The product of Claim 15 wherein the coating does not have a shellac layer.

24. A method for reducing the amount of agent necessary to achieve an effect in an individual as compared a typical agent that is swallowed comprising the
10 steps of:

providing a product including a gum base center and a coating that substantially surrounds the gum base center, the coating including an agent that is typically swallowed by an individual to achieve a specific effect, the product including less than the typical amount of agent that is swallowed by the individual to achieve the effect;

15 chewing the product and thereby causing the agent to be released into the saliva of the individual; and

continuing to chew the product forcing the agent through an oral mucosa contained in a buccal cavity of the individual.

20 25. The method of Claim 24 wherein the agent is a medicament.

26. The method of Claim 24 wherein the medicament is chosen from the group consisting of: analgesics; muscle relaxants; antibiotics; antivirals; antihistamines; decongestants; anti-inflammatories; antacids; anesthetics; antifungal agents; 25 antimicrobial agents; cancer therapies; antimycotics; oral contraceptives; diuretics; antitussives; nutraceuticals; probiotics; bioengineered pharmaceuticals; oral vaccines; hormones; psychotherapeutic agents; and cardiovascular agents.

30 27. The method of Claim 24 wherein the agent is a stimulant.

28. A method of enhancing an individual's performance comprising the
steps of:

providing a product having a chewable water insoluble center and a coating that substantially surrounds the center, the coating comprising at least 50% by weight of the product, the coating including a performance enhancing amount of caffeine; and chewing the product to enhance the performance.

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29. The method of Claim 28 wherein the performance to be enhanced is athletic.

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30. The method of Claim 29 wherein the performance to be enhanced is cognitive.

31. The method of Claim 29 wherein the performance to be enhanced is alertness.

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32. The method of Claim 29 wherein the chewing gum is chewed ten minutes or less before the performance.

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33. A method of delivering a medicament comprising the steps of: providing a product having a center, the center consisting of a chewable water insoluble portion and the product including a coating that substantially surrounds the center, the coating including a medicament; and chewing the product to cause the medicament to be released into a buccal cavity of an individual chewing the chewing gum.

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34. The method of Claim 33 wherein the medicament is chosen from the group consisting of: analgesics; muscle relaxants; antibiotics; antivirals; antihistamines; decongestants; anti-inflammatories; antacids; anesthetics; antifungal agents; antimicrobial agents; cancer therapies; antimycotics; oral contraceptives; diuretics; antitussives; nutraceuticals; probiotics; bioengineered pharmaceuticals; oral vaccines; hormones; psychotherapeutic agents; and cardiovascular agents.

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35. The method of Claim 33 wherein the coating includes a masking agent.

36. The method of Claim 33 wherein the coating comprises at least 50% by weight of the product.

37. The method of Claim 36 wherein a sufficient amount of the masking agent is used to provide acceptable organoleptic properties to the product.

38. A method for delivering a medicament to an individual comprising the steps of:

providing a product that includes a gum base center that is substantially coated by a formulation that includes a medicament and a sufficient amount of a masking agent to provide acceptable organoleptic properties, only the coating including water soluble components; and

chewing the product to cause the medicament to be released from the formulation into a buccal cavity of the individual.

15 39. The method of Claim 38 wherein the medicament is chosen from the group consisting of: analgesics; muscle relaxants; antibiotics; antivirals; stimulants; antihistamines; decongestants; anti-inflammatories; antacids; anesthetics; antifungal agents; antimicrobial agents; cancer therapies; antimycotics; oral contraceptives; 20 diuretics; antitussives; nutraceuticals; probiotics; bioengineered pharmaceuticals; oral vaccines; hormones; psychotherapeutic agents; insulin; vitamins; minerals; and cardiovascular agents.

40. The method of Claim 38 wherein the taste masking agent is chosen from the group consisting of: zinc gluconate, ethyl maltol, glycine, acesulfame-k, aspartame; saccharin; fructose; xylitol; isomalt; maltitol; spray dried licorice root; glycerhizine; sodium gluconate; glucono delta-lactone; vanillin; dextrose; sucralose; and ethyl maltol.

30 41. The method of Claim 38 wherein the masking agent comprises approximately 30% to about 99% by weight of the coating.

42. A method of manufacturing a medicament containing product comprising the steps of:

5 preparing a center consisting essentially of water insoluble components; and
coating the center by placing layers of a powder and a syrup on the center to
create a coated product, at least one of the powder or syrup layers including a
medicament; and
the coated product comprising at least 50% by weight syrup and powder
coating.

10 43. The method of Claim 42 wherein the coating includes a high-intensity sweetener.

15 44. The method of Claim 42 wherein the medicament is chosen from the group consisting of: analgesics; muscle relaxants; antibiotics; antivirals; antihistamines; decongestants; anti-inflammatories; antacids; anesthetics; antifungal agents; antimicrobial agents; cancer therapies; antimycotics; oral contraceptives; diuretics; antitussives; nutraceuticals; probiotics; bioengineered pharmaceuticals; oral vaccines; hormones; psychotherapeutic agents; insulin; vitamins; minerals; and cardiovascular agents.

20 45. The method of Claim 44 wherein the powder comprises at least 70% by weight of the coating.

25 46. The method of Claim 44 wherein the coating does not include a shellac layer.